

Work Order ID 136497

646.3301

136497

Page 1

Thursday, September 03, 2015 7:32:24 AM

B136497

Item ID: 646.3301

REV. N/CB Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Upper Cutter Assy

Start Date: 9/4/2015 Start Qty: 5.00 *5*

Cust Item ID:

Required Date: 9/4/2015 Req'd Qty: 5.00 *5*

Customer:

Reference:

Approvals: Process Plan: MCD Date: SEP 08 2015 Tooling: _____ Date: _____
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start *NR1*
 Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
646.3300	NC3

110	Pick Kit	0.00
-----	----------	------

110

Packaging

Packaging

Memo

0.01

5X

DAS
36
9-89
15/10/22

120

120

Small Fab

Small Fab

Memo

0.05

TWO fastener must be install finger-tight (see note 9)

Assemble as per dwg and apply loctite 598 on all faying surfaces shown on dwg per note 7.

A/R RTV LOCTITE 598: 133436
 exp. date: 07/17

5X

DAS
36
9-89
15/11/23

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

Work Order ID 136497

136497

Page 2

Thursday, September 03, 2015 7:32:24 AM

Item ID: 646.3301 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Upper Cutter Assy
 Start Date: 9/4/2015 Start Qty: 5.00 ***5*** Cust Item ID:
 Required Date: 9/4/2015 Req'd Qty: 5.00 ***5*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	QC5- Inspect part completeness to step on W/O	0.00							
130									DAS
QC	Memo	0.01				(5)			38
Quality Control									9-00
									NOV 04 2015
140	Identify as per dwg & Stock Location: CCK018	0.00							
140									
Packaging	Memo	0.00				(5)			MLJ 15-11-06
Packaging	***IDENTIFY AS PER APICAL MPP-120 BY STAMPING THE P# AND REV***								
150	QC21- Final Inspection - Work Order Release	0.00							
150									
QC	Memo	0.00							MLJ NOV 06 2015
Quality Control									

MLJ NOV 06 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QS1042) Approval	
Description Work Order Deviation			Disposition		
			Completed By		
			Lead hand / Supervisor Approval Verification		
			QC / QA Coordinator Approval		
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

Picklist Print

Thursday, September 03, 2015 7:32:28 AM

Page 1

Work Order ID: 136497

136497

Parent Item: 646.3301

646 3301

Parent Item Name: Upper Cutter Assy

Start Date: 9/4/2015

Required Date: 9/4/2015

Start Qty: 5.00

Required Qty: 5.00

Comments: IPP REV:A 12.10.19 NEW ISSUE DD VERF:JLM
REV:B 15.01.07 AS PER DWG NC3 DD VERF:JLM

IPP

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
646.3310 *646 3310* LH Half		Manufactured	No			110	Each	12.0000	1	5			DAS 6 9-09
**													

Location	Loc Qty	Loc Code
MF	12	
124425	9	
125832	3	

646.3311 *646 3311* RH Half		Manufactured	No			110	Each	6.0000	1	5			DAS 6 9-09
**													

Location	Loc Qty	Loc Code
MF3	6	
125166	2	
131608	4	

646.3312 *646 3312* Center Plate		Manufactured	No			110	Each	13.0000	1	5			DAS 6 9-09
**													

Location	Loc Qty	Loc Code
MF	13	
125437	8	
125852	5	

646.3313 *646 3313* Upper Guide		Manufactured	No			110	Each	1.0000	1	5			DAS 6 9-09
**													

Location	Loc Qty	Loc Code
cck102	1	
131609	1	

5
131608x1
756472x4
135436

5
135457

DAS
6
9-09
OCT 11-9 2014

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐		OTHER : ☐					

Picklist Print

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Work Order ID: 136497

136497

Parent Item: 646.3301

646.3301

Parent Item Name: Upper Cutter Assy

Start Date: 9/4/2015

Required Date: 9/4/2015

Start Qty: 5.00

Required Qty: 5.00

646.3314	Manufactured	No	110	Each	6.0000	1	5	DAS 6 9-89
646.3314						**	136680x4	
Blade								

			<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>			
			MF	6				
			127669	6				
646.3315	Manufactured	No		110	Each	2.0000	1	DAS 6 9-89
646.3315						**	136236	
Blade								

			<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>			
			MF	2				
			131610	2				
646.3316	Manufactured	No		110	Each	0.0000	1	DAS 6 9-89
646.3316						**	136170	
Blade								

NAS1149FN832P	Purchased	No		110	Each	2,336.000	36	180	DAS 6 9-89
NAS1149FN832P						**			
Washer									

	<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>	
	ST260a	1415		
	125268	1415		
	st268	921		
	M130388	921		

OCT 19 2014

OCT 19 2014

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QS1042) Approval	
Description Work Order Deviation			Disposition		
			Completed By		
			Lead hand / Supervisor Approval Verification		
			QC / QA Coordinator Approval		
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : _____					

Picklist Print

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Work Order ID: 136497

136497

Parent Item: 646.3301

646.3301

Parent Item Name: Upper Cutter Assy

Start Date: 9/4/2015

Required Date: 9/4/2015

Start Qty: 5.00

Required Qty: 5.00

MS21042L08

Purchased

No

110

Each

800.0000

18

90

MS21042L08

Nut

**

15/11/02

DAS
36
9-89

Location

Loc Qty

Loc Code

CA	101
m129682	101
ST260a	16
m131697	16
ST304	683
123900	16
m128401	102
m128429	3
m131317	62
m132930	500

NAS1149F0332P

Purchased

No

110

Each

1,499.000

6

30

NAS1149F0332P

Washer

**

15/11/02

DAS
36
9-89

Location

Loc Qty

Loc Code

GA	210
122063	210
ST260a	1196
m128401	6
m131026	80
m131697	110
m133077	1000
st268	93
123900	7
m130388	86

30

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY			
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐
Design	☐	Operator	☐	Bending	☐	Set-up	☐
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐
LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐
Past Expiry Date	☐	Manufacturing Process	☐	OTHER : _____			
Misidentified	☐	Past Due	☐				

Picklist Print

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Work Order ID: 136497

136497

Parent Item: 646.3301

646 3301

Parent Item Name: Upper Cutter Assy

Start Date: 9/4/2015

Required Date: 9/4/2015

Start Qty: 5.00

Required Qty: 5.00

AN3-12A

Purchased

No

110

Each

87.0000

2

10

AN3-12A

Bolt

**

15/11/02

DAS
36
9-89

Location

Loc Qty

Loc Code

GA

44

m129682

44

ST349

43

m133064

43

10

MS21042L3

Purchased

No

110

Each

811.0000

3

15

MS21042L3

Nut

**

15/11/02

DAS
36
9-89

Location

Loc Qty

Loc Code

FP001

377

M130922

377

GA

227

M131317

227

ST305

207

116549

12

126333

49

M128754

2

M132123

17

M132382

2

M132883

17

M132930

108

15

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation			Disposition		
			Completed By		
			Lead hand / Supervisor Approval Verification		
			QC / QA Coordinator Approval		
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : _____					

Picklist Print

Thursday, September 03, 2015 7:32:28 AM

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Work Order ID: 136497

Parent Item: 646.3301

Parent Item Name: Upper Cutter Assy

136497

646 3301

Start Date: 9/4/2015

Required Date: 9/4/2015

Start Qty: 5.00

Required Qty: 5.00

MS27039-08-19

Purchased

No

110

Each

594.0000

18

90

DAS
36
9-89

MS27039-08-19

Screw

Location

Loc Qty

Loc Code

ST260a

100

m133077

100

ST273A

465

m131317

221

m132930

244

ST281

29

m131264

29

AN3-14A

Purchased

No

110

Each

127.0000

1

5

DAS
36
9-89

AN3-14A

Bolt

Location

Loc Qty

Loc Code

ST338a

100

m132825

100

ST348

27

m132680

27

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ No Re-verification ☐ Design ☐ Operator ☐ Doc/Data ☐ Offset/Setup ☐ Equip/Tooling ☐ Supplier ☐ Handling/Pre ☐ Training ☐ Material ☐ Use for Testing ☐ Internal Transport ☐ Poor Information ☐ Tribal Knowledge ☐ Rushing ☐ LOA ☐ Product Improvement ☐ Substation ☐ Process Improvement ☐ Past Expiry Date ☐ Manufacturing Process ☐ Misidentified ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
		OTHER : ☐							

INDUSTRIES, INC.

ENGINEERING CHANGE NOTICE NO.

04765

SHEET 1 OF 1

DWG NO. 646.3300

REV: NC

PREPARED BY J. SOTO

DATE: 12/08/2014

EFFECT ON DWG
☐ INC. ☒ UNINC.

DWG TITLE: UPPER CUTTER ASSY

APPROVED BY:

ENGR

MFG

QC

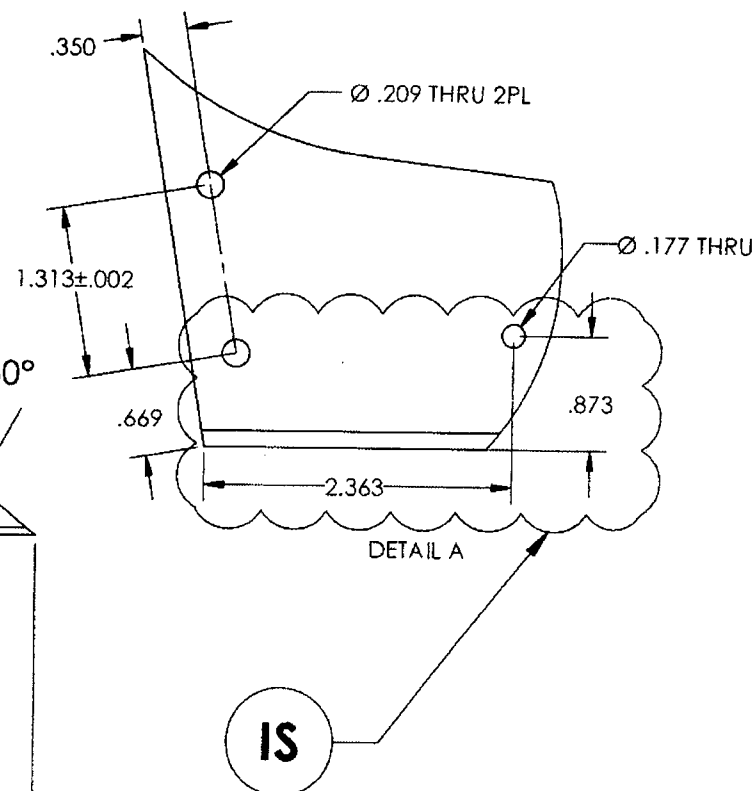
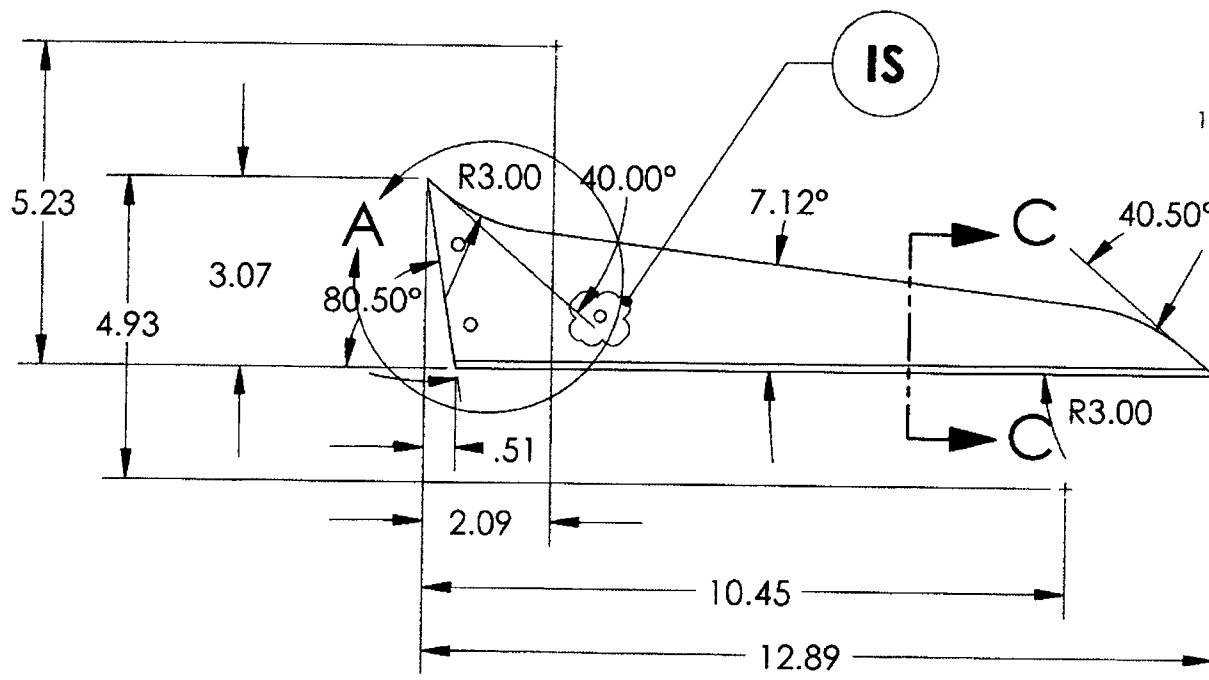
EFF.	NEXT ORDER
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TRANSACTION CODES (TC):
A-ADD C-CREATE
R-REVISE D-DELETE

REASON: ADDED HOLE DIMENSION TO 646.3313.

SHEET 5 IS:

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 136497 MLC
1509-08



DOCUMENTS EFFECTED:

☐ MDL ☐ INSTALL INSTRUCTIONS ☐ ICA ☐ FMS ☐ BOM

CHANGE CATEGORY

☐ MAJOR ☒ MINOR

DER REVIEW REQUIRED

☐ YES ☒ NO

APICAL
INDUSTRIES, INC.

ENGINEERING CHANGE NOTICE NO. 03724

SHEET 1 OF 1

DWG NO. 646.3300

REV: N/C

PREPARED
BY B. PETERS

DATE: 12/05/12

EFFECT ON DWG
☐ INC. ☒ UNINC.

DWG TITLE: UPPER CUTTER ASSY

APPROVED BY: ENGR

MFG

QC

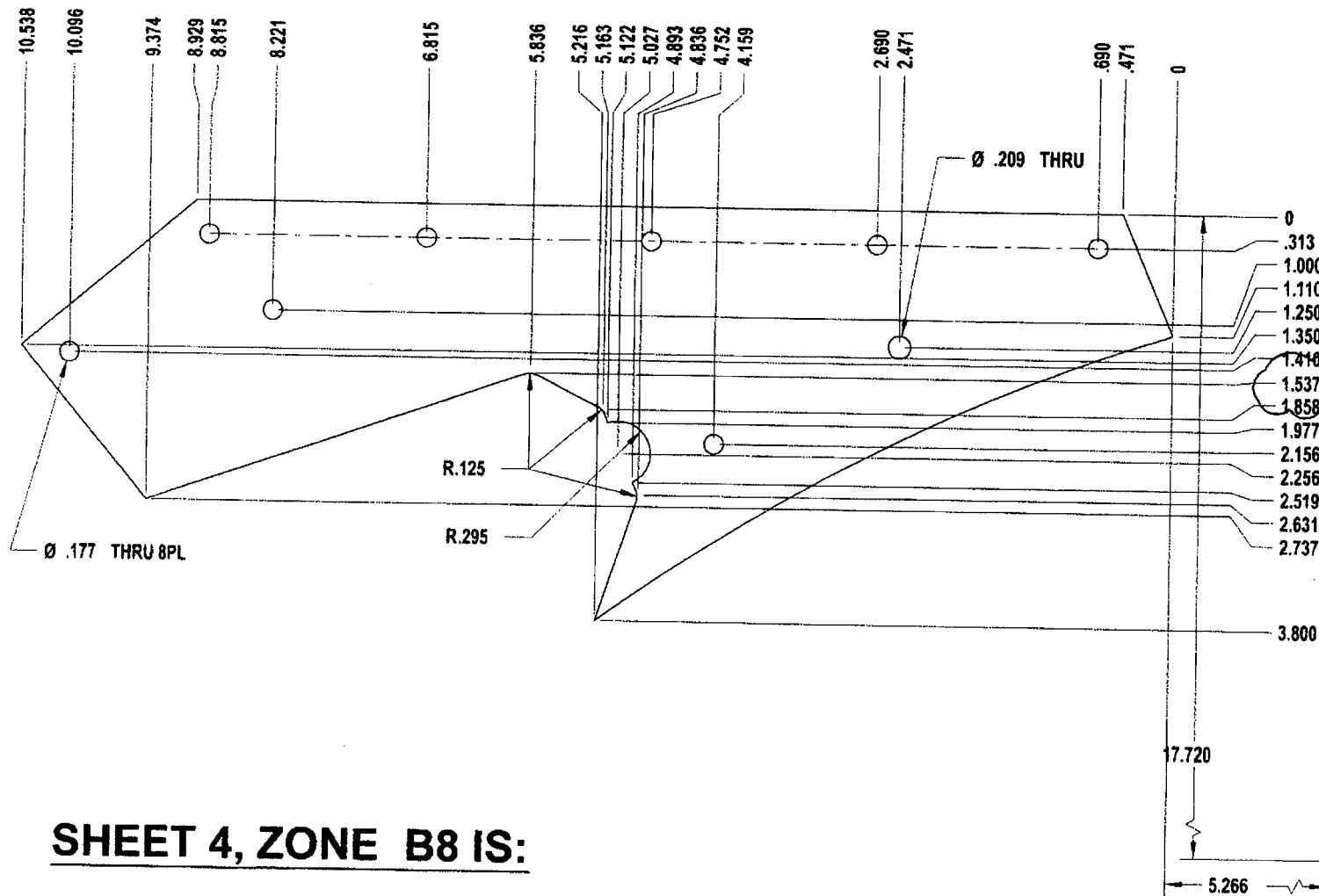
EFF: NEXT ORDER

TRANSACTION CODES (TC)
A-ADD C-CREATE
R-REVISE D-DELETE

REASON:

REVISED ORDINATE DIMENSION.

ECR:
D-12-025



SHEET 4, ZONE B8 IS:

DOCUMENTS EFFECTED:

☐ RFMS ☐ MDL ☐ INSTALL INSTRU ☐ ICA ☐ BOM

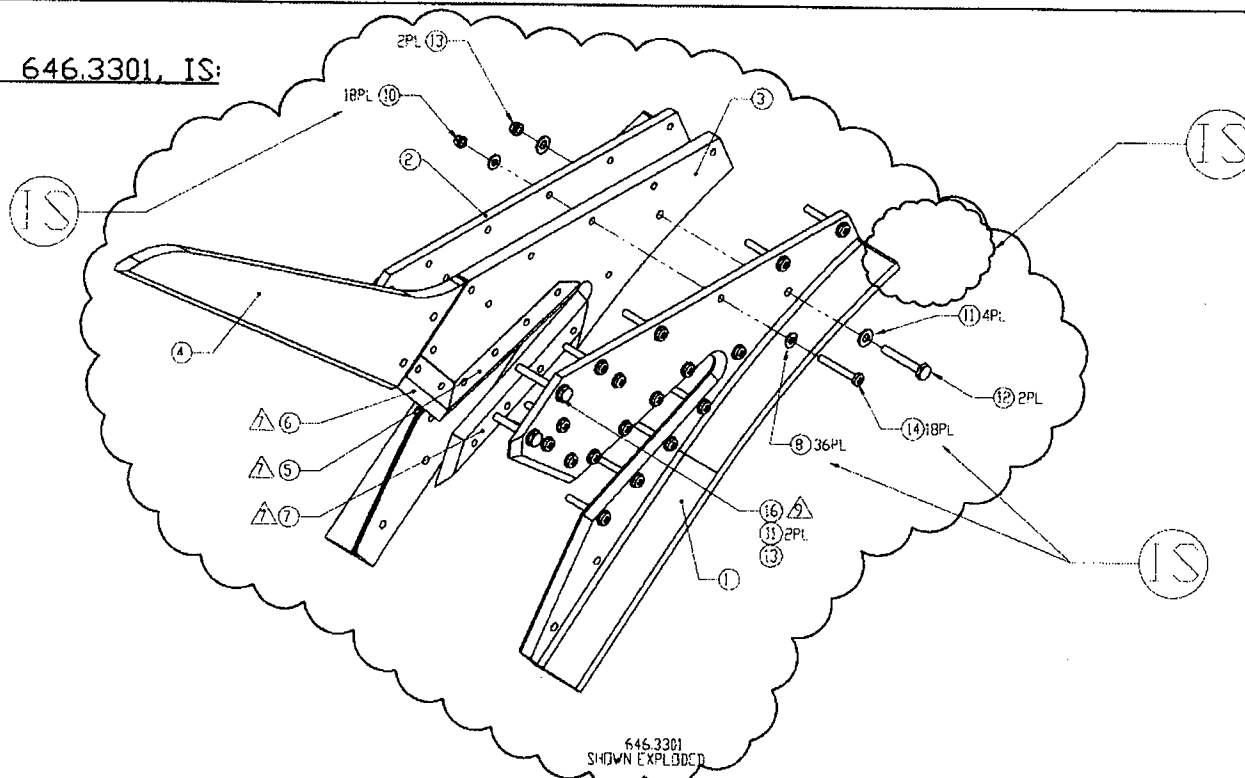
CHANGE CATEGORY
☐ MAJOR ☒ MINOR

DER REVIEW REQUIRED
☐ YES ☒ NO

APICAL
INDUSTRIES, INC.

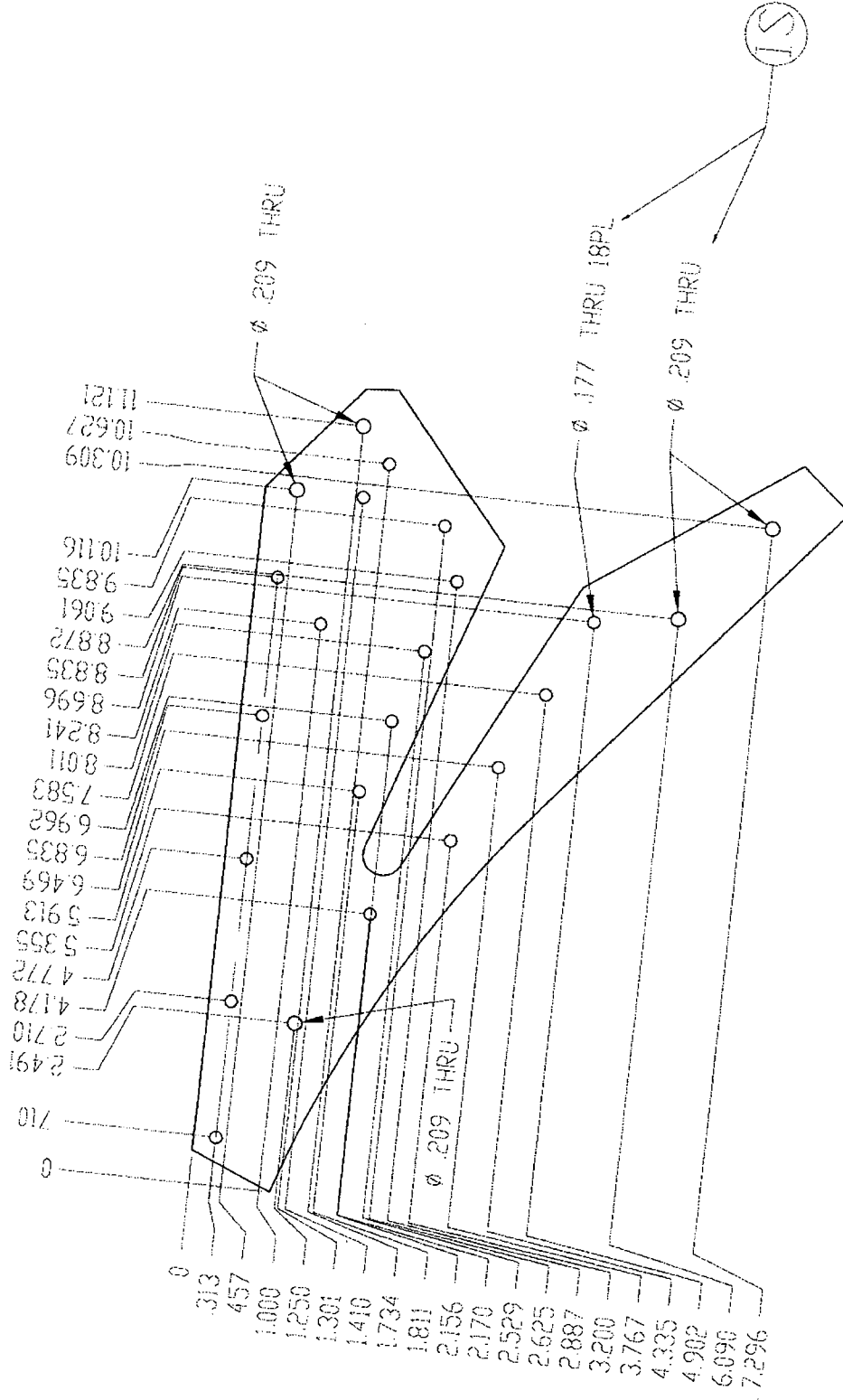
ENGINEERING CHANGE NOTICE NO.		02196		SHEET 1 OF 2	
DWG NO.	646.3300	REV: N/C	PREPARED BY	S. HUFF	DATE: 01/05/09
DWG TITLE:		UPPER CUTTER ASSY			
APPROVED BY:	ENGR <i>[Signature]</i>	MFG	<i>[Signature]</i>	QC	<i>[Signature]</i>
					EFF: NEXT ORDER
TRANSACTION CODES (TC): A-ADD C-CREATE R-REVISE D-DELETE		REASON: REMOVED RIVETS IN FAVOR OF ADDITIONAL SCREWS			

SHEET 1, VIEW 646.3301, IS:



14	R	601.2765		18	SCREW	MS27039-0819
10	R	601.1541		18	LOCKNUT	MS21042L08
9	D	601.2766		3	RIVET	MS20470AD5-18
8	R	601.2764		36	WASHER	NAS1149FN832P
				3301		
F/N	TC	PART NUMBER	QTY	DESCRIPTION		MATERIAL/SPECIFICATION
DOCUMENTS EFFECTED:						
☐ MDL ☒ INSTALL INSTRUC ☒ ICA ☐ FMS ☒ BOM						
CHANGE CATEGORY ☐ MAJOR ☒ MINOR						
DER REVIEW REQUIRED ☐ YES ☒ NO						

SHEET 3, SECTION VIEW A-A, IS:



SECTION A-A

C	PART NUMBER	QTY	DESCRIPTION
---	-------------	-----	-------------

MATERIAL/SPECIFICATION

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED



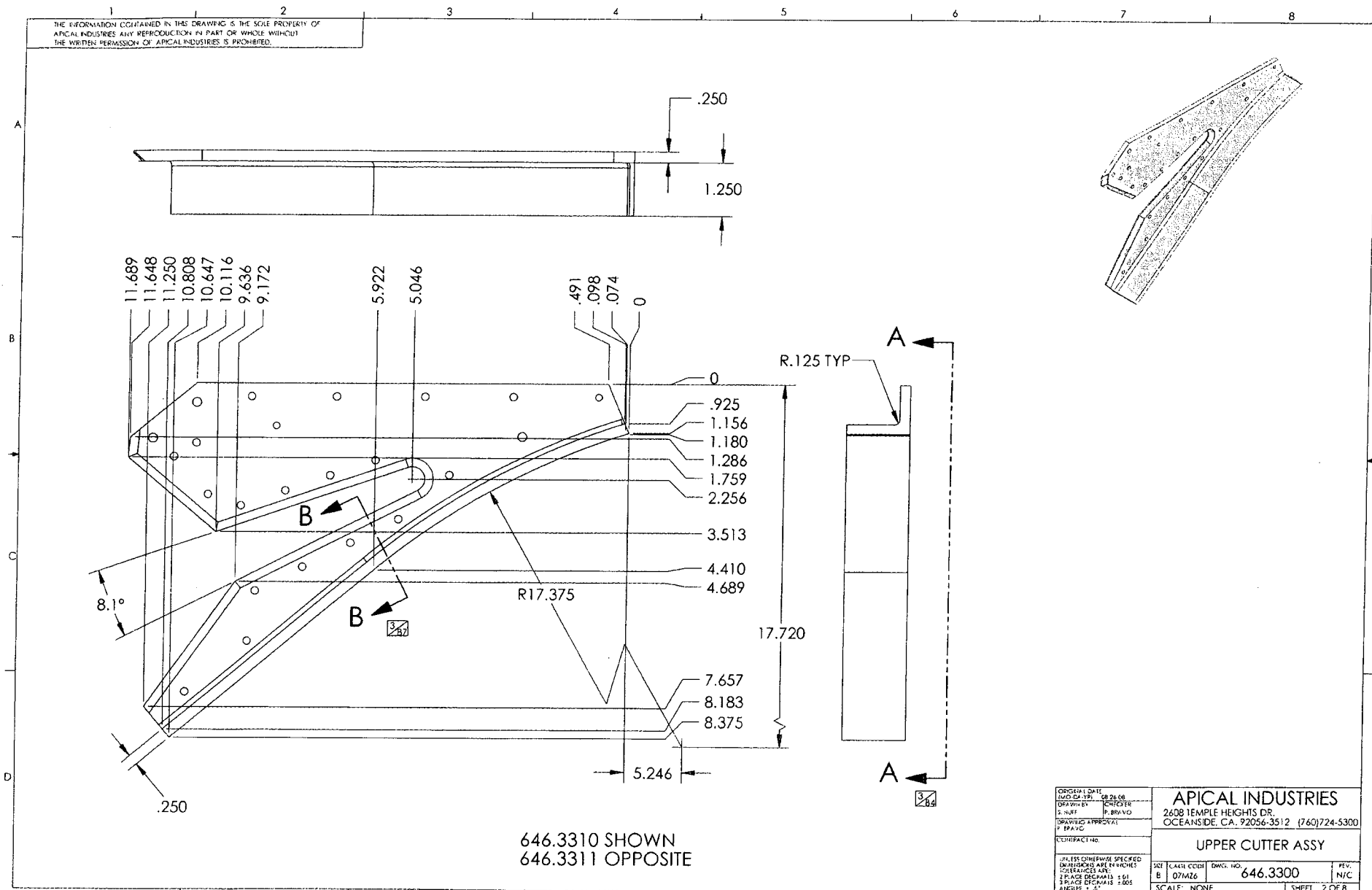
NOTES:

- ① MATERIAL: ALUMINUM 7075-T651 PER AMS-QQ-A-250/12
- ② FINISH: HARD ANODIZE IAW MIL-A-8625 TYPE III,
CLASS 2, COLOR BLACK;
CARDINAL 4860-50 PRETREATMENT PRIMER
PRIME IAW MIL-P-23377 J TYPE I CLASS N
- ③ MATERIAL: AISI A2 TOOL STEEL
CONDITION: ANNEALED
POST PROCESS: HEAT TREAT TO 58-62 Rc ROCKWELL HARDNESS
- ④ FINISH: PRIME IAW MIL-P-23377 J TYPE I CLASS N
5. DEBURR AND BREAK ALL SHARP EDGES EXCEPT WHERE OTHERWISE NOTED
6. IDENTIFY IAW MPP-120
- ⑦ APPLY F/N 15 AS REQUIRED TO ALL FAYING SURFACES OF F/N 5, 6 & 7 UPON ASSEMBLY
- ⑧ CUTTING EDGE INTENDED TO BE SHARP, DO NOT BREAK SHARP EDGE
- ⑨ INSTALL FASTENER FINGER-TIGHT

646.3301
SHOWN EXPLODED

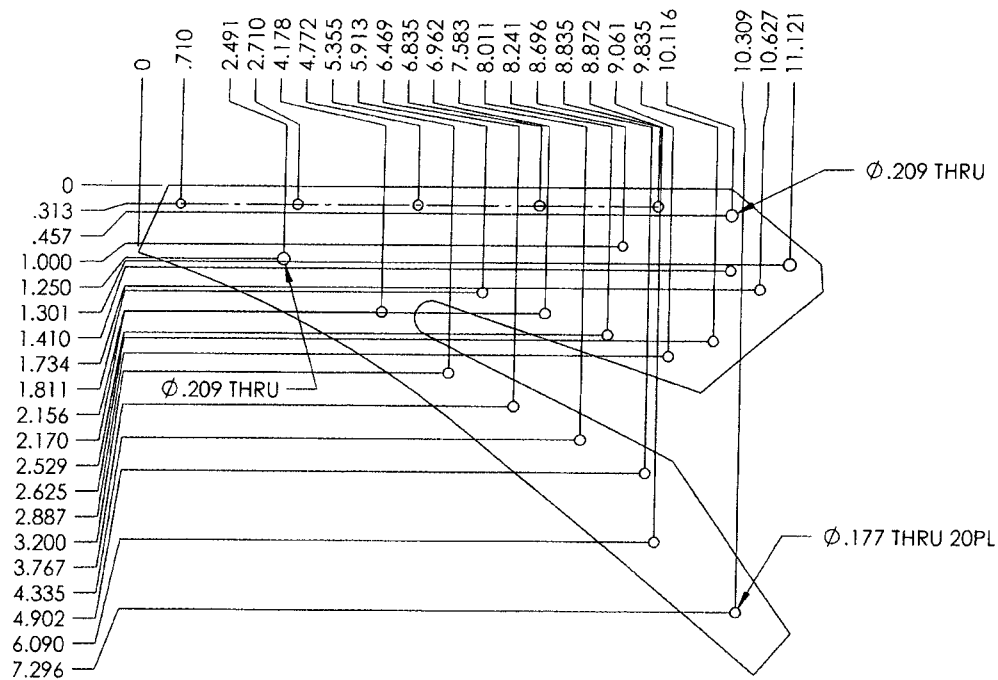
	1	16	601.2834	BOLT		AND 1/4"			
	A/R	15	601.2045	RTV, LOCTITE 598					
	15	14	601.2765	SCREW		MS27539-08-19			
	3	13	601.1624	LOCKNUT		MS27542-3			
	2	12	601.2763	BOLT		AND 1/4"			
	6	11	601.1607	WASHER		MS11449D332P			
	15	10	601.1541	LOCKNUT		MS21042L08			
	3	9	601.2766	RIVET		MS20470A 05-18			
	30	8	601.2764	WASHER		MS11449H332P			
	1	7	646.3316	BLADE				△	△
	1	6	646.3315	BLADE				△	△
	1	5	646.3314	BLADE				△	△
	1	4	646.3313	UPPER GUIDE				△	△
	1	3	646.3312	CENTER PLATE				△	△
	1	2	646.3311	RH HALF				△	△
	1	1	646.3310	LH HALF				△	△
	1		646.3301	UPPER CUTTER ASSY					
	100	FINID #	PART #	DESCRIPTION		MATL		SPEC.	
QTY				PARTS LIST					
NEXT ASSY (\$)				APICAL INDUSTRIES					
646.4000				2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA 92056-3512 (760)724-5300					
				UPPER CUTTER ASSY					
				SHEET 1 OF 8					

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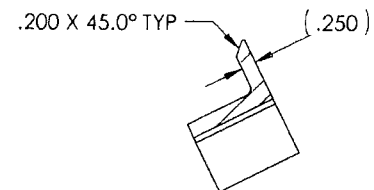


ORIGINAL DATE: 08-26-08 DESIGNED BY: J. ROYER S. HUF: P. BRAYD DRAWING APPROVAL: P. BRAYD C/IMPACT NO.:		APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ± .01 3 PLACE DECIMALS ± .005 ANGLES ± .5°		SHEET: 07/126 DWS. NO.: 646.3300 SCALE: NONE	REV: N/C SHEET: 2 OF 8

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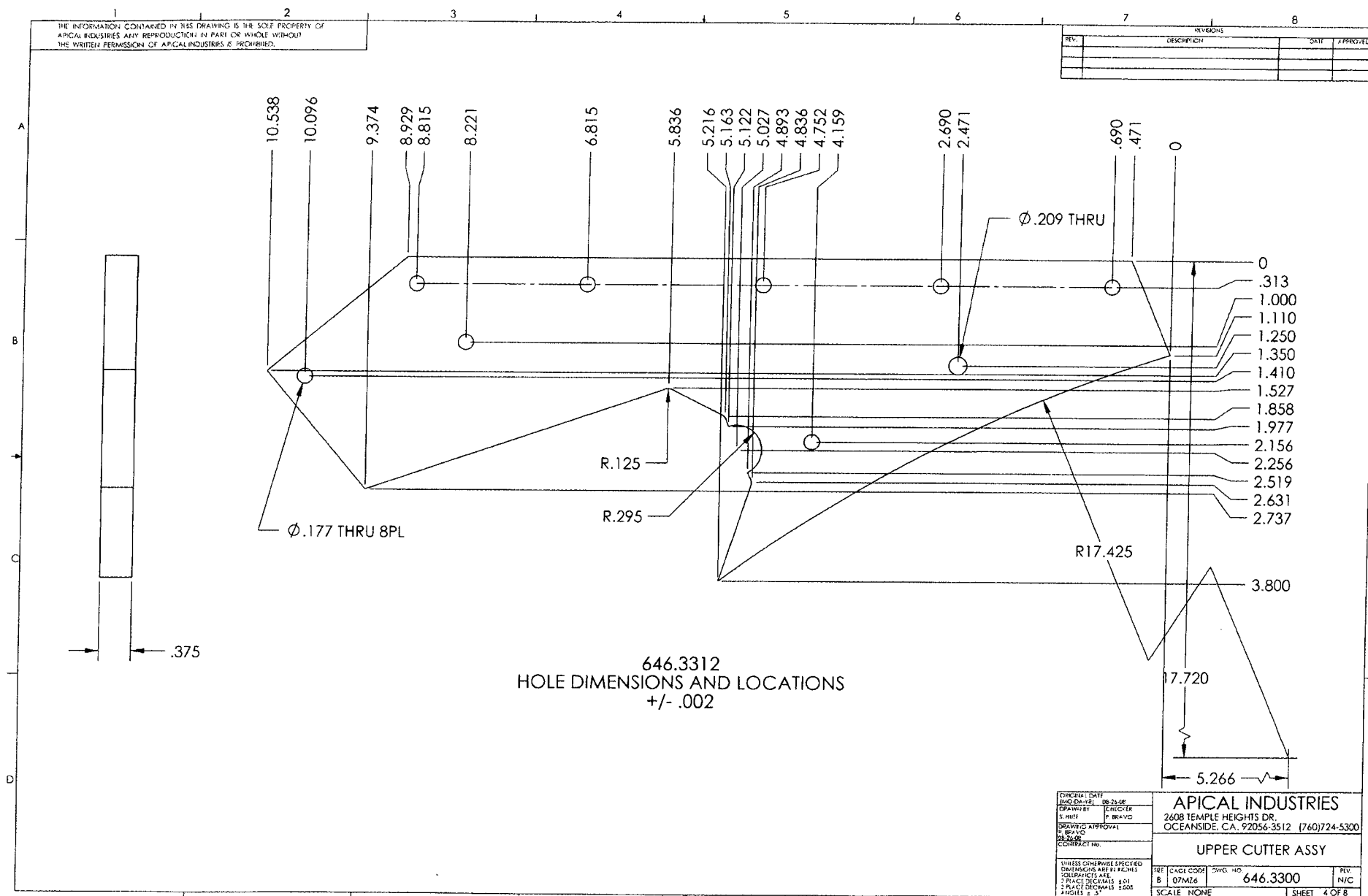


SECTION A-A



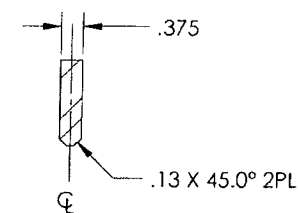
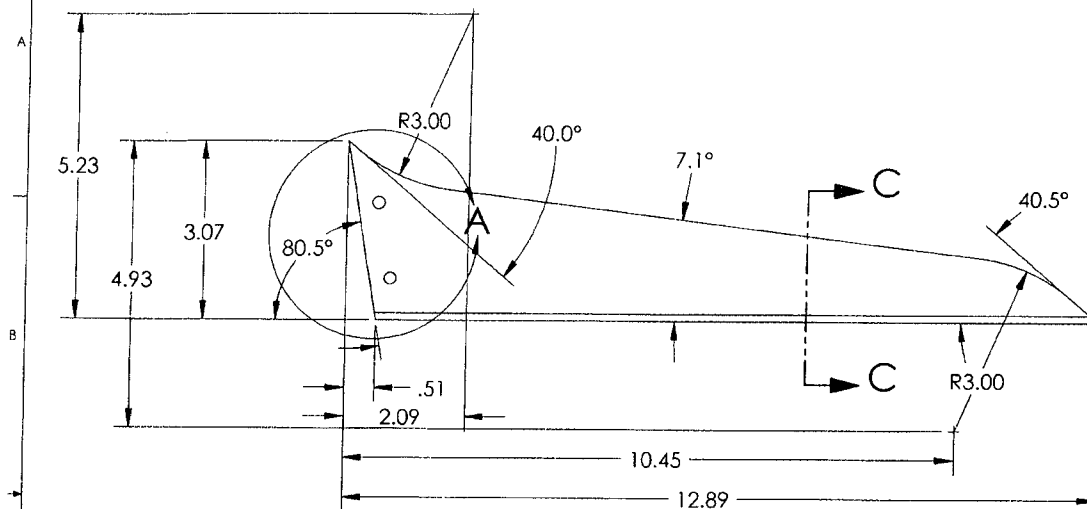
SECTION B-B

ORIGINAL DATE: 08-26-99		APICAL INDUSTRIES	
DRAWN BY: S. HUFF	CHECKED: P. BRAVO	2608 TEMPLE HEIGHTS DR.	
DRAWN BY: APPROVAL:		OCEANSIDE, CA, 92056-3512 (760)724-5300	
CLINICAL NO.		UPPER CUTTER ASSY	
UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES.		REV. 07/12/06	646.3300
TOLERANCES ARE:		SCALE: NONE	REV. N/C
1 PLACE DECIMALS ±.05			
2 PLACE DECIMALS ±.005			
3 PLACE DECIMALS ±.0005			
ANGLES: ±.5°			
		SHEET 3 OF 8	

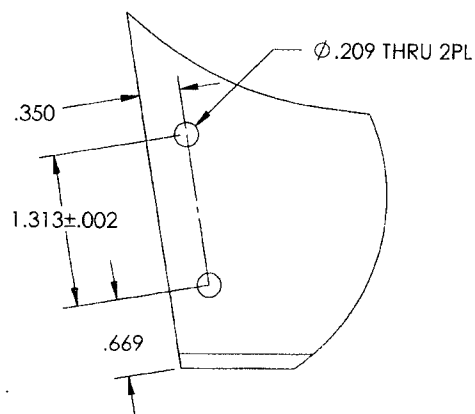
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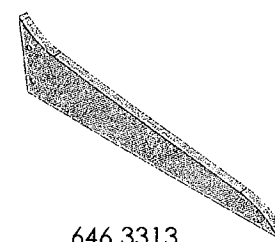
REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED



SECTION C-C



DETAIL A

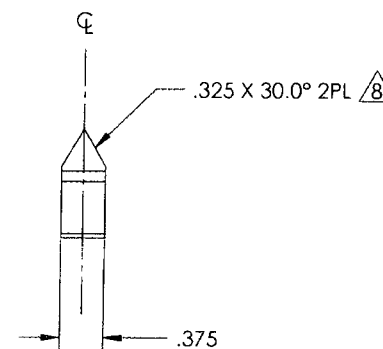
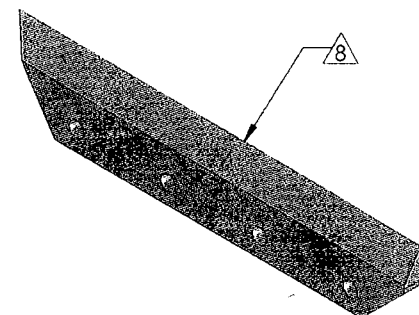
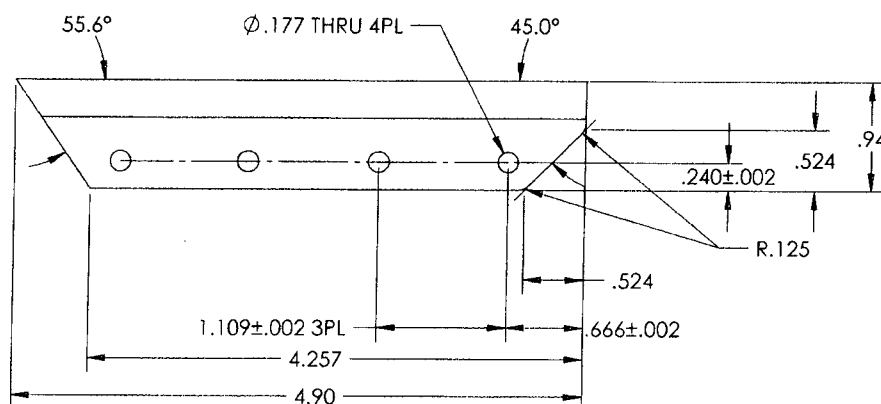


646.3313

ORIGINAL DATE: 08-26-06 DRAWN BY: J. HUFF CHECKED BY: P. BRAY DESIGNED BY: P. BRAY DATE: 08-26-06 SCALE: NONE	APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300
CONE PART 140	
UPPER CUTTER ASSY	
INVESTIGATE SPECIFIED DIMENSIONS AT THE INDICATED PLACES (CIRCLED) AND 5 PLACES (CIRCLED) 1:001 5 PLACES (CIRCLED) 1:001 3 PLACES (CIRCLED) 1:001	REV. N/C
SCALE: NONE	646.3300
SHEET 5 OF 8	

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REVISION			
REV.	DESCRIPTION	DATE	APPROVED



646.3314

ORIGINAL DATE 10-01-81		DATE 08-26-06	
DRAWN BY S. HUBB		CHECKED BY P. STAVO	
DRAWING APPROVAL P. BLASO		CONTRACT NO. 646.3300	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.005 ANGLES ±.5°		REV. B 07/02/06	REV. N/C
SCALE NONE		SHEET 6 OF 8	

APICAL INDUSTRIES

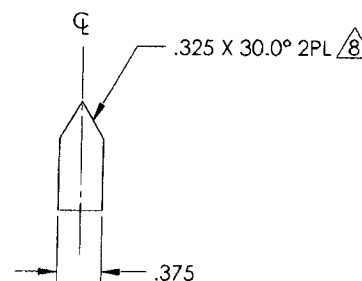
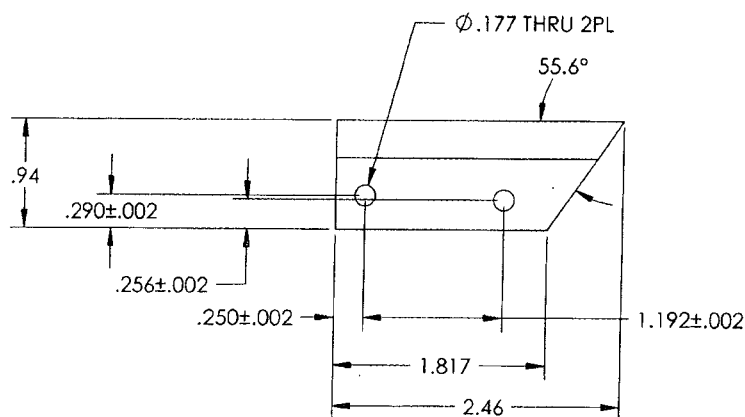
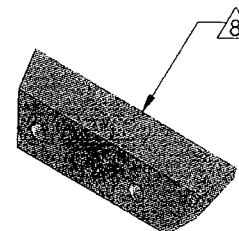
2608 TEMPLE HEIGHTS DR.
OCEANSIDE, CA. 92056-3512 (760)724-5300

UPPER CUTTER ASSY

646.3300

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REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED

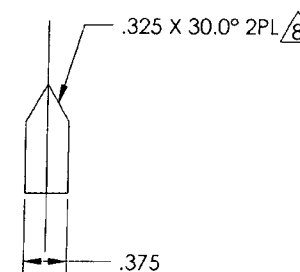
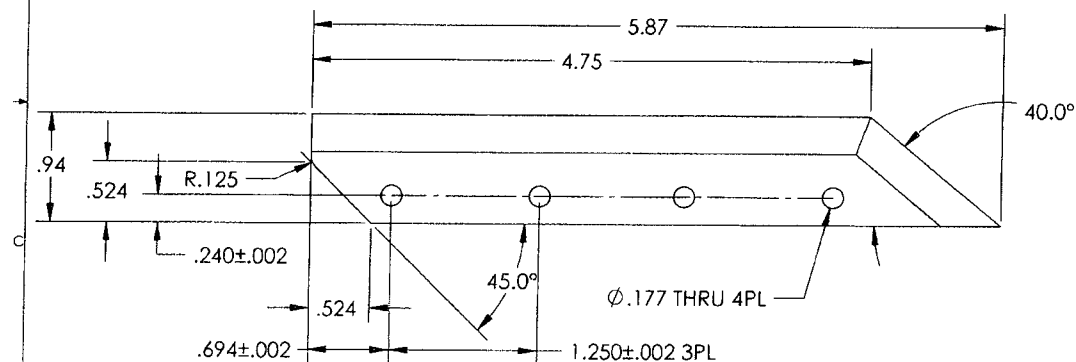
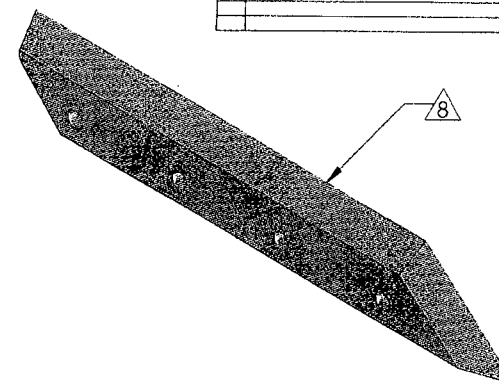


646.3315

ORIGINAL DATE 08-20-08		APICAL INDUSTRIES	
DRAWN BY S. HUFF		2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760) 724-5300	
CHECKED BY P. BEAVO		UPPER CUTTER ASSY	
DRAWING APPROVAL P. BEAVO		REV N/C	
CONTRACT NO.		SHEET 7 OF 8	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 2 PLACE DECIMALS ± .01 3 PLACE DECIMALS ± .005 ANGLES ± .5°		SCALE NONE	

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REV.	DESCRIPTION	DATE	APPROVED



646.3316

ORIGINAL DATE (DD-MY-YY) 08-26-08		APICAL INDUSTRIES	
DRAWN BY: J. CECIL		2608 TEMPLE HEIGHTS DR.	
1. NOTE: P. BRAYO		OCEANSIDE, CA. 92056-3512 (760)724-5300	
DRAWING APPROVAL P. BRAYO		UPPER CUTTER ASSY	
CONTRACT NO.		SHEET 8 OF 8	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: 1. FRACTIONS DECIMALS .001 2. DECIMALS .001 3. PLACES DECIMALS .001 4. ANGLES .5°		REV: 07/02/06	646.3300
SCALE: NONE		SHEET 8 OF 8	